

COMPOSITE BIOCIDAL PARTICLES

ABSTRACT OF THE INVENTION

A biocidal composition is disclosed comprising composite particles, each of said composite particles containing a shell and a core, said core comprising a metal or a metal-containing compound wherein the metal is a moiety selected from the group consisting of zinc, copper, bismuth, silver, zirconium, and combinations thereof said shell comprising a pyrithione adduct comprising the reaction product of pyrithione with a portion of said core metal or metal compound. In one aspect, an anti-fouling composition is disclosed comprising (a) an anti-soft-fouling effective amount of copper pyrithione; and (b) an anti-hard-fouling effective amount of a copper-containing salt, or oxide or hydroxide thereof. The present invention also relates to a method of making an antifouling composition comprising particles of copper pyrithione and a copper-containing salt that is effective against hard-fouling and soft-fouling organisms.